MATERIALISM IN ITS RELATIONS

TO THE

CAUSES, CONDITIONS, AND TREATMENT

OF

INSANITY.

BY

H. B. WILBUR, M. D.,

SUPERINTENDENT OF THE NEW YORK ASYLUM FOR IDIOTS.

[*REPRINTED FROM THE JOURNAL OF PSYCHOLOGICAL MEDICINE, JANUARY*, 1872.]

NEW YORK:
D. APPLETON & COMPANY,
549 & 551 BROADWAY.
1872.

Digitized by the Internet Archive
in 2019 with funding from
This project is made possible by a grant from the Institute of Museum and Library Services as administered by the Pennsylvania Department of Education through the Office of Commonwealth Libraries

https://archive.org/details/materialsminits00wilb

MATERIALISM IN ITS RELATIONS TO THE CAUSES, CONDITIONS, AND TREATMENT OF INSANITY.[1]

The drift of modern science, judged by its surface, is toward materialism. The term is used in its philosophic and not in its theological sense. Not to discuss the general doctrine, I desire to make a few suggestions upon certain special aspects of the subject, that would seem to come within the scope of this occasion and this assembly. I would call your attention, then, to the effects of the practical application of modern materialistic views, in estimating the causes, conditions, and treatment of insanity.

As I am addressing an audience of practical alienists, familiar with the literature of their specialty, I will, to save time and narrow the discussion, take for my text a paper that has just fallen under my observation, in the April number of the *American Journal of Insanity.*

[1] A paper read before the Association of Superintendents of Insane Asylums at their last annual meeting, at Toronto.

I say to limit the discussion, for I purpose, in the main, to refer only to opinions, the materialistic basis, or tendencies, or consequences of which are not always perceived by those who hold them. Still running quite parallel with these, in some aspects, are certain other dogmas, the direct outcome of an acknowledged materialism, that may be referred to incidentally.

The paper meant is one entitled "The Dependence of Insanity on Physical Disease." It was read before the Medical Society of the State of New York, at its last meeting. Its author, an ex-president of the Society, was known to that body as the Superintendent of the State Lunatic Asylum, as the principal editor of the *American Journal of Insanity*—a man of large experience in the study and treatment of insanity, a frequent medical witness in our highest courts, and accustomed to expressing his views upon the subject. From such a source, it might well be regarded as the clear and authoritative exposition of the well-settled opinions of your special profession.

That no injustice may be done the author, it may be said here that he is no materialist. He would disclaim the charge at once. In the January number of the *Journal of Insanity*, there is an article, apparently from the same pen, in which the views of Dr. Hammond, in the JOURNAL OF PSYCHOLOGICAL MEDICINE are stigmatized as "flat materialism," and then denounced in no measured terms. The paper in question is entitled "The Dependence of Insanity on Physical Disease." It may be remarked that hardly any medical man in these days would object to the general statement or proposition that insanity is frequently, or perhaps even generally, dependent upon or associated with physical disease, functional or organic; but this paper, if it proves any thing, proves that insanity is *invariably* the result of physical causes, is *invariably* dependent upon physical conditions. In other words, the prime condition, the essential element, is a pathological state.

The two are quite distinct propositions, and with practical consequences that differ still more widely. First, then, as to the doctrine of the paper. You have doubtless all read it,

but I quote a few passages (p. 397): "The true and only method by which insanity can be studied is that followed in all other diseases. The physical lesions are the subjects of primary importance. These must be studied through physiology and pathology. The mental manifestations are here secondary and dependent. . . . We say that insanity is a bodily disorder; that it is a disease of the brain. This does not imply that there is something to be thrown off in the character of some morbid entity. It simply means that certain changes have taken place in the brain or its investing membranes, which imply a departure from healthy physiological action, and that, *in consequence* of these changes, there is more or less prolonged disturbance of the mind. The physician recognizes the delirium of fever, and refers its origin to the brain." This extract, if it means any thing, means that insanity is always caused by cerebral disease, or rather always is cerebral disease, of an organic character.

(Again, on p. 385): "In insanity, therefore, we have the dominating organ always deranged in function, if not further. Whatever the cause may be, physical or mental, or whether the brain is primarily or secondarily affected, the condition in insanity is cerebral disease. Disease is what we have to deal with. Not disease of mind, for the mind, the spiritual principle, the immortal being, cannot be the subject of disease. The manifestations of the mind are disturbed and disordered when the brain, which is its organ, suffers. . . . The expression 'disease of mind' should have a place, in the nomenclature of modern medical science, with witchcraft and demonomania. They are alike the offspring of metaphysical speculation, alike misinterpretations of phenomena."

(Again, on p. 399.) He has been speaking of certain phenomena which he asserts are explainable under physiological and pathological laws. "Now, should we stop inquiry here, when insanity results? Can we admit that insanity is any thing more or less than a pathological condition, or that it lies beyond the boundaries of ordinary and legitimate medical study, and beyond the range of clinical observation or pathological investigation? Will not the patient study which

elucidates the one be likely to elucidate the other? But in the latter the mind is affected? So is it in delirium, so is it in a degree in its operations in all diseases, when the mind is affected.". . . Farther on: "We do not *treat* these mental phenomena; but we regard them simply as exponents of physical states. We hold that it is not necessary, in order to establish the physical origin (that is, producing cause) and nature of insanity, or other cerebral disease, to show that every case is of such origin and nature. If, in a single case, insanity is shown to come on as the result of a well-recognized bodily disease, and the mental disturbance disappears *pari passu* with the physical restoration, the argument is invincible."

Running through these extracts, it will be observed, the thread of argument is something like this: Inasmuch as insanity is a physical disease, of which mental derangement is only a symptom, the cause or influence determining it must be a physical one; the ultimate pathological seat must be in the encephalon; the means of cure and hope of relief must lie in remedial agencies based upon such pathology, recourse being had occasionally to the faint, indirect, and strictly reflex influences, of a moral nature.

Now, let us examine the statistics, to see the origin of insanity; or, in other words, to see what produces this bodily state, for it is upon these statistics that his opinions upon the origin and nature of insanity are professedly based. In Dr. Gray's annual report for 1863, to which he refers, and from which he largely quotes in the present paper, his present views were somewhat foreshadowed, though then less pronounced, and more deferential to those previously held by his professional brethren. He contented himself, then, with expressing the conviction that more careful observation would reveal physical causes as productive of more cases of insanity than moral causes.

A table of analysis of the causes of insanity was given in that report, covering a period of twenty-one years, in the history of the Utica asylum. This showed a decrease of moral causes from 46 per cent. to 9 per cent.; an increase of physical causes from 33 per cent. to 72 per cent. The percentage

of unascertained causes did not differ very much at the different intervals. In the paper before us, the table is brought down to 1870, inclusive. The first thing to be done is to exclude the "unascertained causes." They only confuse the lessons to be drawn from the tables, and destroy the proper ratio of percentage of the two classes of causes. For, in analyzing statistics, the value of the induction depends upon the assumption that any ratio established in the known cases will also hold good of the unknown or general population.

Table showing the Analysis and the Percentage of Moral, Physical, and Unascertained Causes as recorded in the Admission for Twenty-eight Years.

YEAR.	Analysis of Causes.			Percentage of Causes.			YEAR.	Revised Table.			Percentage.	
	Moral Causes.	Physical Causes.	Unascertained Causes.	Moral Causes.	Physical Causes.	Unascertained Causes.		Moral Causes.	Physical Causes.	Total.	Moral Causes.	Physical Causes.
1843..	128	93	55	46.38	33.70	19.93	1843..	128	93	221	58.	42.
1844..	108	93	74	39.27	33.82	26.91	1844..	108	93	201	53.7	46.3
1845..	106	93	94	36.18	31.74	32.08	1845..	106	93	199	53.1	46.9
1846..	110	95	132	32.64	28.19	39.17	1846..	110	95	205	53.6	46.4
1847..	127	139	162	29.67	32.48	37.85	1847..	127	139	266	47.7	52.3
1848..	116	160	129	28.64	39.51	31.85	1848..	116	160	276	42.	58.
1849..	100	141	121	27.62	38.95	33.42	1849..	100	141	241	41.4	58.6
1850..	88	242	37	23.98	65.94	10.08	1850..	88	242	330	26.6	73.4
1851..	110	229	27	30.05	62.57	7.37	1851..	110	229	339	32.4	67.6
1852..	117	261	12	30.	66.92	3.08	1852..	117	261	378	30.9	69.1
1853..	107	292	25	28.07	68.87	5.89	1853..	107	292	399	26.9	73.1
1854..	96	231	63	24.62	59.23	16.15	1854..	96	231	327	28.9	71.1
1855..	55	187	33	20.	68.	12.	1855..	55	187	242	22.7	77.3
1856..	45	158	39	18.60	65.29	16.11	1856..	45	158	203	22.1	77.9
1857..	31	157	47	13.19	66.81	20.	1857..	31	157	188	16.5	83.5
1858..	63	221	49	18.92	66.37	14.65	1858..	63	227	290	21.7	78.3
1859..	57	212	43	18.27	67.95	13.78	1859..	57	212	269	21.2	78.8
1860..	47	237	53	13.95	70.33	15.73	1860..	47	237	284	16.5	83.5
1861..	40	184	71	13.56	62.37	24.07	1861..	40	184	224	17.9	82.1
1862..	33	197	57	11.50	68.64	19.86	1862..	33	197	230	14.3	85.7
1863..	26	208	53	9.06	72.48	18.46	1863..	26	208	234	11.	89.
1864..	21	242	56	6.58	75.86	17.55	1864..	21	242	263	8.	92.
1865..	19	261	76	5.41	73.35	21.24	1865..	19	261	280	6.8	93.2
1866..	12	263	113	3.09	67.78	29.12	1866..	12	263	275	4.3	95.7
1867..	....	321	80	....	80.05	19.95	1867..	....	....	...	....	100.
1868..	....	296	86	....	77.49	22.51	1868..	....	....	....	....	100.
1869..	....	378	85	....	81.65	18.35	1869..	....	....	....	....	100.
1870..	....	432	49	....	85.66	11.34	1870..	....	....	....	....	100.

YEAR.	Dr. Gray's Table of Religious Causes.	Revised Table of Religious Causes.
1843	18.15	22.
1844	9.81	13.
1845	8.15	12.
1846	9.92	09.73
1847	7.22	11.61
1848	6.40	09.42

We have, then, in the revised table, the percentage of moral causes in 1843, 58 per cent.; in 1848, 42 per cent.; in 1863, 11 per cent.; in 1866, 4 per cent. For the four years since 1866, there have been 1,427 cases admitted, whose previous history was known, from all parts of the State, from every variety of natural endowment and social condition, with every form and degree of insanity, and not a single one originating in moral causes. Connecting this fact with what is affirmed repeatedly in connection with the statistics, viz., that in the increasing light thrown upon the causation of insanity, by improved means of pathological research, and more comprehensive views in the profession, the retroactive inference is unmistakable, that had these been brought to bear upon the cases of earlier record, the moral causes would have been equally wanting.

May it not be asserted, then, that this paper, if it proves any thing, proves that all cases of insanity, when properly investigated, will be found to have had their origin in physical causes?

Subordinate to the main argument of the paper is a statement of the sequences in the phenomena of insanity. The following, he thinks, "experience warrants us in assuming as fundamental starting-points." And herein I think that his views may correspond with those of many of his professional brethren. Thus, insanity more frequently has its primary origin in pathological states outside of the brain than in primary diseases of the brain, though the reverse order of physical causation may be true. But the insanity is not manifested until the brain is actually involved. That there are physical signs and symptoms, by which experience enables us to trace the progress of cerebral disease, anticipating its successive features, is very certain. But every thing in the paper, in the way of doc-

trine or suggestion, hinges upon the *invariability* of the dependence of insanity upon brain-disease for its origin and nature. But, is this proved? First, as to the causes. Let us take the question as he found it. Dr. Brigham, the first Superintendent of the New York State Lunatic Asylum, "held, with Pinel, Esquirol, and Georget, that moral causes were far more operative than physical in the production of insanity. In 1851, Dr. Jarvis, in an exhaustive paper upon the subject of the causes of insanity, sums up the statistics then accumulated, with this remark: "The moral causes are, according to the record, almost as abundant as, and probably they really are more abundant than, the physical causes."

Dr. Griesinger (in the second edition of his work, 1861) says: "The psychical causes are, in our opinion, the most frequent and the most fertile sources of insanity, as well in regard to preparation, as especially and principally the immediate excitation of the disease. We recognize, meanwhile, that this view rests not only on statistics, but also on the collective impression of many observations, which are often concealed in their most important details, or this impression would probably be a still stronger one." We have, then, on the one hand, looking at the opinions of alienists as a body, a pretty general belief that the moral causes are the predominating ones; or, at least, very commonly the sources of insanity. We have, on the other, a few members of the profession, of whose views Dr. Gray is the exponent, who deny the existence of moral causes in producing insanity.

To accept the views of causation set forth in this paper, we must either concede that the facts presented are more conclusive, or else that the arguments offered are more convincing than those which lie at the foundation of the other belief referred to.

To follow the order of the paper, let us first examine the facts presented. The fallacies that may lurk even in the table given, showing the "analysis of causes," may arise from three or four, not to mention other causes: a preconceived theory in the mind of the parties who controlled the records upon which the table is based; the difficulty in getting at the facts precisely; and, finally, in the arrangement of the facts and in the inferences drawn from them.

The bias of the mind that guided, during the last twenty years, in the collection of the statistics here embodied, can hardly be questioned. Dr. Gray frankly says, at the very outset: "I early observed that, in those cases of which full and reliable information could be obtained, the physical cause was generally found; that some change in some part or parts of the organism preceded the earliest manifestations of mental disturbance; that in those cases some diseased condition of the body, outside of the brain, generally preceded the cerebral symptoms and the consequent insanity." (When he says here cerebral symptoms, he means, of course, symptoms of cerebral disease.) The logical temper of mind, if I may so express myself, which he brings to the investigation of the subject and collation of facts, may be seen in the following passage: "We hold that it is not necessary, in order to establish the physical origin and nature of insanity or other cerebral diseases" (meaning psychical symptoms), "to show that every case is of such origin and nature. *If, in a single case*, insanity is shown to come on as the result of a well-recognized bodily disease, and the mental disturbance disappears *pari passu* with the physical restoration, the argument is invincible." (I shall return to this quotation hereafter.)

Again, it is hardly necessary to call attention to the negative and unreliable character of statistics, in the mass, collected as these must necessarily have been. With your experience, I only need to allude to some of the difficulties in the way of getting any considerable or accurate history of cases. The persons who bring the patients to an asylum are often ignorant; and, when not ignorant, with very little real knowledge of the case. The access of the disease is often so gradual; the occurrences happened so long ago; the mental and physical symptoms are so slightly deviated from the normal standard, or run so nearly parallel, that there would be a liability of mistake in assigning causes in the case of an intelligent, unprejudiced, and careful observer. By general acknowledgment, too, in many cases the insanity is the result of a combination of influences. Even when the opportunity is afforded of obtaining medical testimony, the party giving

it may either be ill prepared to discriminate properly in the matter of causation, or takes the cue for his answers from the questions sent him from the asylum. But with intelligent friends and an educated physician to observe, in any case, you then have the fact that, in regard to all subjective symptoms of mind or body, the insane person's own testimony is of little value, even when he is disposed to give it. What he should feel, he is not conscious of; and his supposed feelings are morbid or imaginary.

Dr. Brigham, who originated the tables of statistics of causation at the Utica Asylum, in his first report, thus expresses his opinion as to the proper estimate to be placed upon them: "The causes of many diseases are obscure; those of insanity are often peculiarly so. Hence, we find few authorities attempt to give any thing but the *supposed* or probable cause. We have endeavored to be as accurate as possible in investigating the cause of insanity in each individual admitted. We have interrogated relatives, neighbors, and physicians (so far as we have had opportunity), who were knowing to the cases sent to us, and have neglected no means in our power for ascertaining the exact causes of the attack. In many cases the evidence thus obtained has been satisfactory, and we feel but little doubt of the correctness of the causes assigned, *but in many others we have not obtained such evidence as to enable us to state them with confidence.*"

After six years' experience at Utica, Dr. Brigham reiterates the same opinions, in similar language; adding, "we have given a table of supposed causes, but do not attach any great value to it." In his administration, the ratio of unascertained causes was an increasing one; that is to say, he was less and less satisfied with the evidence furnished in the matter of causation. After his death, the percentage of unascertained causes fell from 33 to 10 per cent; that is to say, his successors had more faith in the correctness of assigned causes.

We may now examine the table of causes, as upon this the argument of the paper is based. As I have before mentioned, it starts with an error. It includes, in the percentage-table, the cases where the causes are unascertained. Any one

familiar with statistical tables will see that this confuses the comparison made, and vitiates the ratio or percentage. I have therefore revised the table, leaving out the unascertained causes. I also give a revised table of percentage of cases from religious excitement during the six years that Dr. Brigham was in charge at Utica.

Of the table, it is said in the paper: "Here we have a gradual and marked decrease in moral and increase in physical causes. This is neither accident nor design. It results from experience and recorded facts." And again, speaking of the number of cases attributed to religious excitement, excessive study, etc.: "These and kindred causes were recognized less and less as efficient influences in the production of disease, in the lifetime of Dr. Brigham, under the light of experience."

Let me mention a few circumstances that will modify these statements somewhat. In the first place, the year 1843 was an exceptional year. It was the year when the Miller excitement in regard to the end of the world was producing a widespread anxiety among the ignorant and excitable portion of the community. Thousands believed in the approaching day of doom, gave up all attention to worldly matters; in some cases even distributed their property and spent their time in watching and prayer. Other multitudes, without positively believing, shared the anxiety in a greater or less degree. That and the two or three succeeding years was a time of more than ordinary attention to religious matters among sects less fanatical—a period of "protracted meetings" and "revivals." After allowing for these special causes, the percentage of moral and religious causes varies no more during Dr. Brigham's connection with the asylum than might well happen without imputing to him a change in his views of causation.

The fact was, Dr. Brigham was no novice when he went to Utica, but carried with him, not only quite superior natural endowments for the position he was to fill, but a ripened experience in all questions relating to insanity. We are not, however, left to surmise as to his opinion upon the subject at any period of his connection with that institution. In the very last report he wrote, he repeated his former opinion:

"We believe that moral causes are far more operative than physical in the production of insanity"—and then added that, in his opinion, of the some sixteen hundred patients admitted to the asylum up to that time, whose history was known, less than two hundred of them could properly be attributed to physical causes.

His views, then, upon the subject of the efficiency of moral causes did not undergo a change under the light of experience, as is alleged in the paper. On the contrary, if we may believe his own words, he was only the more confirmed in his formerly-expressed views. The truth is, the change in the ratio of causes was not all the result, as it is expressed, "of the steady progress of medical knowledge deduced from patient investigation, intelligent observation, and careful analysis of facts." There were no such wonderful changes in these respects at the Utica Asylum, that should bring down the percentage of moral causes from 41 in 1849 to 26 in 1850, if that were the tendency under such conditions. The change was in the new theory of causation that came in with Dr. Brigham's successors.

As in all tables of a similar character, it must be conceded that this one is made up of part fact and part inference. Thus, while, in the last four years included in the table, all cases from moral causes have disappeared—not one remaining—yet, on consulting the records of the asylum upon which this table is based, I find that quite a percentage of the cases are put down as "from ill health produced by overwork, grief, anxiety, loss of sleep, and domestic trouble."

A patient is brought to this or any other asylum. The friends allege that the insanity came on as the result of injury of the head, meningitis, or other sufficient physical cause. It is so recorded in the case-book.

Another patient comes, and the friends of this one assign a different cause. It was from a sudden fright, excessive grief, long-continued anxiety, intense and protracted dwelling upon some especial train of thought, extreme religious excitement, or other moral cause. The superintendent, or person entering the case on the register, however, does not believe in the efficiency of moral causes in the production of insanity; there is,

at all events, now, some physical disease associated with the mental disturbance or derangement, and he goes behind the statements of these friends or informants, and records the cause, ill health from domestic trouble, or ill health from religious excitement, or what not.

We have now to add, in a certain class of cases, another stage of the succession of phenomena in insanity, as given by Dr. Gray. First, a severe mental shock, followed by anxiety or grief; then disease of some part of the system outside the brain; then disease of the brain or some positive and pathological modification of the cerebral structure; and, finally, mental derangement. Interrupt this sequence anywhere short of the last feature, and no insanity occurs. But, every day in the year, in some individual, grief, severe care, domestic trouble, anxiety, or excessive mental labor, produces ill health, and the ill health results in some disease of vital organs, and there is also some cerebral disease ensuing; but no mental derangement follows; the person is not insane. In other words, mental derangement is only a symptom of insanity, according to this theory, and yet, if this particular symptom is not present, then there is no insanity.

I have dwelt thus long upon the tables, because they are made the foundation of the general argument of the paper. Dr. Gray concedes that the weight of authority (at all events down to a recent period) seems to favor the opinion that the moral predominate over the physical causes in the production of insanity. These tables were offered as a refutation of such opinions; and, in part also, as showing that those who held the former views had themselves undergone a partial conversion to the theory he advocates, constrained by the logic of these and kindred facts.

He kindly apologizes for the mistaken notions of his predecessors, by the suggestion that it was owing to the fact that "insanity was regarded as a moral state, a spiritual or demoniacal possession, and influenced by the moon. Many of the older medical authorities refer to and describe demonomania as a form of mental disease. The disinthralment of the professional as well as the public mind, on this subject, has been slow and gradual. However, we have similar ignorance and superstition in other fields of medical research."

The thought is, it will be observed, that these eminent alienists held erroneous ideas upon the subject of causation in insanity, because they were the victims of a lingering medical ignorance and superstition. In the case of one of them, however (Dr. Brigham), this cloud which overhung and obscured his mental horizon was gradually yielding to the rays of "experience and recorded facts."

And this is offered by one who himself brings into the discussion of a strictly scientific topic, before an association of medical men, his own personal and theological opinion.

This defence or apology, however well intended, does not meet the case at all, and, moreover, is not needed. For let us look at the facts, both as related to these particular individuals to whom reference is made and the profession generally.

Pinel and Esquirol, and for that matter Dr. Brigham, were about as far removed from any disposition to defer to superstitious notions as men could well be. They were always ready and willing to follow scientific observation to any conclusion to which it might lead. Besides, the superstitious notions referred to had been dead and buried, so far as alienists were concerned, for centuries. In science generally, or in the special department of medicine, materialism is no new doctrine. At intervals, its ebb and flow can be traced as far back as the history of science goes. Moreover, human consciousness, in health or sickness, has been substantially the same, whenever and wherever civilization has so obtained as to leave any men or class of men above the necessity of a close devotion to the supply of their daily and immediate physical wants.

To all this sum of prior experience in medical science and psychological knowledge were added opportunities of observation, in relation to insanity, equal to those of our own time. Besides, in intellectual attainments, habits of mind and enthusiasm in their work, these men have had no superiors since. To talk, then, about the influence of superstitious notions upon alienists like these seems quite absurd.

But let us look at the prevailing opinion at the period preceding, say, the last twenty years.

For many years before our time, certainly, the doctrines held upon the subject of the causation of insanity have been

substantially those held, I suppose, by the majority of the profession now. These opinions were and are the embodiment of the experience and wisdom of medical men from the earliest times. It was neither believed that man consisted of body alone, or mind alone. He was a compound being, with the physical and mental nature so intimately related that the functions of the one could not be disturbed without deranging the functions of the other; and, if the disturbing cause was long continued, there was a reciprocal, untoward influence on the nature first affected; there was organic disease produced, or mental derangement, or both.

The brain was regarded as the organ of mind, the instrument through which the sensational basis of thought or mental action was received, one remove nearer the thinking *ego* than the nerves of sensation, and the organ of mind in fulfilling its purposes; behind, in course and action, the nerves of voluntary motion. Like the other and subsidiary portions of the nervous system, it is subject to all the laws, conditions, and effects of agency. In adequately estimating the nature of this compound being, consciousness is to be consulted as well as physiology.

Now, the early alienists, in studying insanity, brought to bear upon it the physiological and pathological knowledge of their times, and also the testimony of their own consciousness when under the influence of abnormal sensations, false reasonings, violent emotions, and perverted states of will. And why not?—for, the dividing line between physical health and disease is no more dubious and uncertain than the boundary between sanity and mental derangement.[1]

[1] But this has been stigmatized as an "approach to the subject of insanity through the dark portals of metaphysics." And yet it can be approached in no other way, it would seem to me. For, it may be asked, How do we know that an insane person is laboring under a delusion, insane impulse, or frenzy, except as we bring his feelings, thoughts, and acts, to the test of our own consciousness, and human consciousness generally, as to his proper ideas, emotions, and conduct, in any given circumstances, and in due relation to his past history and experience? We have certain acts, on the part of the insane man, obvious to our senses; but the insane nature or promptings to those acts are seen or inferred only by a reference to consciousness. When we say that he is not responsible for his acts, it is because we judge, from experience in the observation of similar or analogous

They saw the reciprocal influence of body upon mind and mind upon body. They knew that ill health did produce morbid feelings, and that morbid feelings would bring on ill health; and that it was only necessary to protract a reciprocal action in these respects, to have organic disease of body or derangement of mind. They thus conceived of two classes of causes as operating in producing insanity, either as predisposing or exciting causes. In singling out one as the assignable cause, and that the most obvious and direct antecedent, it was not to the exclusion of other less palpable influences, working to the same end. They knew also that insanity could not be predicated, with certainty, upon any given amount or degree of mental shock or bodily affection. Each individual, by his constitution, endowments, and habits, was a law unto himself.

In applying their ideas of causation to the prevention of insanity, they advised the proper care of the body, as well as the avoidance of the other and more subtle influences which

cases (our own personal experience failing us), that somehow, or in some way, he has lost mental self-control.

Another stage in the investigation of the subject is to establish, in a sufficient number of cases, the existence of a definite relation between certain functional or organic changes in the physical system and specific mental phenomena. It is conceded that the fact of such relation is all that can be ascertained by any research whatever. The how and the why of this relation are beyond the scope of human thought. And in this inquiry, it should be noticed, in passing, that each stage or step is as strictly a scientific one as any other. Up to this time, it is admitted that physiological and pathological investigation has gone but little way in establishing any uniform correspondence between definite physical states and special forms of mental derangement. And, to the alienist, the main, practical end of establishing this correspondence is to enable him to infer from the mental phenomena the associated pathological condition, that he may meet this, if remediable. Up to this time, also, it must be confessed that such investigations have resulted only in the conclusion that, where organic disease of the brain exists—by inference—it is still an open question whether the cerebral lesion is the cause or the result of the mental disturbance, and in such cases that there is little hope of any benefit from ordinary remedial means. That mental restoration in such cases is to be hoped for only through moral means conjoined with efforts to establish the general health. In short, it is only necessary to read the discussions at the meetings of the medico-psychologists, to be convinced that little practical advantage in the treatment of insanity has as yet accrued from pathological investigations.

experience had shown to be instrumental in inducing the condition. Dr. Brigham's reports were full of valuable suggestions upon this point.

Their mode of treatment was based upon the same comprehensive views. "Rest, nutrition, and medication," they had for the physical symptoms; but, above all, they met the manifestations of mental derangement by a judicious moral treatment. Then, as now, the majority of patients sent to an asylum were cases of some standing. The organic or functional diseases associated with the mental derangement were past the curative stage, as to direct remedial agencies. As specialists, then, while not neglecting the general remedial means common to the profession, their business was to apply the peculiar resources of their own departments.

Moral treatment, so called, acts in two ways: Thus, indirectly, in a reflex manner, proper mental exercise, when possible, contributes to the restoration of a normal condition of the brain itself; and, directly, the mind is diverted from morbid trains of thought, and its power to act in a normal way, in spite of any physical unsoundness, is increased. By these means, too, the insane individual is led to compare his *quasi* or present consciousness with that of those by whom he is surrounded, and, in some cases, with occasional glimpses of his own natural consciousness or former trains of thought.

Now, by what reasoning are these plain facts and clear evidence of science and consciousness met in this paper before us? It has been assumed by its author, it will be remembered, that those who held to the doctrine of the adequacy of moral causes were influenced by old superstitions. He then goes on to say that the effect of these old-fashioned notions was especially seen in their accepting religious excitement so commonly as a cause of insanity. He gives what he calls a solution of these cases, with the assertion, that it is, similarly, the solution of the other cases of mental disease usually ascribed to moral causes. The professed solution is only this: The decrease of the percentage from religious causes, in the Utica tables, fell from seventy-eight to six per cent. in the six or seven years of Dr. Brigham's administration. (I have shown, by revising the table, that the number of these cases is really

quite uniform.) This is the premise. Here is his conclusion: "Thus we perceive" (or therefore) "that more extended experience and more careful observation of these cases revealed" (to Dr. Brigham, understood) "the existence of disordered physical health as the efficient cause of insanity, and the religious depression, or other moral manifestation, as only exciting causes, or as incidental effects." Now, does the table show this? He adds, "This established was an important advance." But has it been established? "Rest, nutrition, medication, could then be presented, in truth, as the relief of sorrow." Observe, if you please, not one word is said about "moral treatment" in conjunction with the physical treatment. And that this is not an accidental omission, a page farther on the following language is used: "To discover, then, under such supposed moral causes that the true source of disease lies in physical disorders is equivalent to substituting rest, sleep, food, and medication, for moral reasonings, and difficult and vexed theological problems." But is there no alternative, it may be asked, in the treatment of insanity, in all its various forms, between hygienic and remedial means, on the one hand, and moral reasonings and difficult and vexed theological problems on the other hand?

Among the unfortunate inheritances of this specialty, it would seem, is the expression "disease of mind." But Dr. Gray would banish this. And yet, the question may be asked, Pray, why discard this term from the nomenclature of modern medical science, as he proposes; that is to say, if we believe, as he does (and as mankind generally have done and do), in the existence of mind as mind, and not as a mere secreted force? Even conceding the invariable presence of certain abnormal bodily conditions, or the constant sequence of phenomena, as described in the paper before us, still the characteristic feature is the mental derangement. Etymologically, mental *disease* is the precise expression to be used in such cases. As well banish the kindred terms melancholia, hypochondria, phrenitis, derangement, psychological medicine, and insanity itself. Even if the word disease had by general consent come to be used commonly in a more restricted sense, there could be no harm in its figurative use

under such circumstances. The object of language is to express ideas. Alienists like Maudsley, who can conceive of mind only as a function of the brain analogous, in its exercise, to other bodily functions, are constrained to speak of mental health as well as bodily health, of mental life as well as physical life.

Take another view. Dr. Gray believes in the existence of mind, if not apart from body, yet in its essence distinct from body and bodily functions. The mind, then, viewed as an entity, there must be conceded to it a life embracing peculiar functions, powers, and faculties, related to each other, and capable of coördination and coöperation. Upon the harmonious action of these severally, as well as upon healthful bodily conditions, must depend all normal mental exercise. It has, according to the paper before us, "spontaneity and responsibility." These involve some other attributes, and of all these it may be said, with propriety, that they are impaired, disordered, deranged, or diseased.

But, accepting extreme materialistic views of the nature of insanity and its causes, there can be no objection to borrowing terms from material science to describe it; especially as all we can know of mind, upon this supposition, must be derived, by analogy, from physical conditions.

Dr. Brigham, in his first as well as in his later reports, dwelt upon the injurious influence of excessive religious excitement in producing insanity. His views were shared by the profession generally in his time, and, I doubt not, by a majority of the profession now. To opposing this opinion, Dr. Gray devotes quite a fraction of his paper, and it seems to me with unwonted confusion of ideas. Upon this subject, I may add, he appears to stand quite alone, so far as my reading goes. The argument is not one that lies against moral causes generally. It is rather the inadequacy of excitement upon religious topics, as among moral causes, to produce any effect in the direction named. Thus he says (p. 381): "We indeed think it is safe to infer that religious anxiety is rarely, if ever, a cause of insanity. The sublime faith of Christianity is rather a safeguard against it, and is unquestionably a support under its scourging. We do not believe that insanity

is produced by this cause directly, by a profound impression made through the sentiments and emotions upon the nervous system; or, indirectly, by gradually undermining the general health." Again: "It will hardly be argued that depression is a phase of religious experience." The confusion of ideas is, that he does not discriminate between the sublime faith of Christianity and the thousand-and-one forms of religious extravagance. Or, as if the path to religious hope, and joy, and peace, was not supposed, by a large part of the religious world, to lie through a sense of exceeding guilt, etc., etc.

Even with more complacent views of what a religious experience should be, we have the ill effects of a too intense introspection upon individual life, and too long-continued dwelling in thought upon themes that pass over the border-line between the finite and the infinite.

It is no more strange that intellectual blindness should follow the protracted contemplation of any one of the divine attributes, than that loss of sight should result from gazing at the mid-day sun.

But the real dogma of the paper is stated with the most emphasis in the following passage: "We hold that it is not necessary, in order to establish the physical origin and nature of insanity or other cerebral diseases, to show that every case is of such origin and nature. If *in a single case* insanity" (that is, mental derangement) "is shown to come on as the result of well-recognized bodily disease, and the mental disturbance disappears *pari passu* with the physical restoration, the argument is invincible." Any thing more inconsistent with the demands of logic could hardly be stated. Remember the general proposition, to be proved by him, is: no physical disease of the brain, no mental derangement, no insanity. Now, nothing short of evidence that the two phenomena, disease of the brain and mental derangement, related as cause and effect, have occurred, not once, but every time, and in every case observed, leaves the argument "invincible." *Pari passu* implies also that, with constant cerebral lesions, there must be uniform psychological effects, and the reverse. The on-coming, the successive steps, and the out-going of the related phenomena, must be invariably parallel and coinci

dent, less the inappreciable interval not yet measured between cause and effect in this specific relation. But let us apply his own reasoning when meeting what he calls the exploded vagaries of the French materialists: "In physiology (and if in physiology why not in pathology?), causes and results must bear a uniform relation; and we should have for so much grief, so many tears; for so much provocation, so much anger, and the like. Instead of having varied manifestations in the same individual as well as in different individuals, from the same causes, the manifestation should be uniform." Now, of what lesion or pathological condition, that has been found associated with a particular form of insanity, can we say that when occurring it will invariably produce the same. In the absence of this invariability the induction is imperfect—by his own showing.

But Dr. Gray expresses his belief in the spontaneity of the mind and its responsibility—of course, on the evidence of his own consciousness: "We do not look at mind from the standpoint of regarding it as nothing more than the result of cerebral action. . . . We say that insanity is a bodily disorder; that it is a disease of the brain; . . . that there is a departure from healthy physiological action, and as a consequence of these changes the mind is disturbed or deranged." The question then may be asked: If there can be no disordered action of the mind without a prior and causative disordered condition or action of the cerebral substance, how can there be predicated any healthy action of the mind without a preceding and causative normal action of the brain?[1]

Herbert Spencer is quoted as if he too believed in spontaneity, though not recognizing it as a factor, in any mere natural or physical process. The fact is, Spencer does not

[1] Dr. Maudsley (p. 385), in reviewing a book of Dr. C. Handfield Jones—who, like Dr. Gray, has attempted to ride two horses at the same time, viz., a belief in the existence of mind distinct from body, and yet that insanity invariably depends upon bodily disease—thus expresses himself: "In all healthy mental life whatever, there is a bodily factor and a purely mental factor; and, in all diseased mental life whatever, there is a bodily factor and a purely mental factor. To write as if sanity is a thing of the immaterial and insanity a thing of the material world is to infer that men are furnished with brains only that they may become insane."

believe in spontaneity at all, for he has somewhere said that he can conceive of volition, but cannot conceive of will. But let us suppose a case. An individual, apparently in perfect health, experiences a sudden shock, followed immediately by some insane feeling, thought, or act. "The mind has been subjected to a stress beyond what it is able to bear." The shock itself, no matter through what avenue of sensation the impression came which produced it, is a mental state; and it may be added, no matter what portion of the nervous or cerebral substance is more intimately related to the mental action.[1] The evidences of the derangement, however expressed, are equally mental, and known only through human consciousness. But between these two phenomena, according to Dr. Gray's theory, there are assumed to be certain intervening physical conditions or stages. The existence of these intermediate stages or processes must be, from the nature of the case, presumed not proved. It is conceded that no research, no analysis, as yet, has furnished any palpable proof of their existence. Nor can there be any opportunity of observation that could positively determine it. For, suppose the intervening stage were some molecular action within the scope of microscopic vision, yet this is necessarily beyond its reach in the living subject. Or, again, suppose the intervening pathological state to be "a modification of polar relations of nervous element," as Maudsley expresses it, with what instrument or analysis is this to be detected? Or, with what mystical vision of the observer is this to be appreciated?

[1] It is not the sensation that produces the shock, but the idea momentarily associated with it. It results from an habitual association of ideas and not from an habitual succession of molecular changes. So of the predisposition, where one exists, that makes one individual more likely than another to become insane in the face of a moral shock; it may be the result of a cerebral tissue weakened by bad physical habits, or it may be the result of a moral weakness, engendered by an habitual yielding to impulse, emotion, or passion. Of the more obscure and gradual moral influences that operate to induce insanity, it is not necessary to interpolate physical links in the chain of causation, even in these. Says a writer in the *English Journal of Mental Science:* "The point to which I desire to call special attention is this: *the direct effect of depressing emotions is to lower moral tone, and to lessen moral control*, in a greater or less degree. It is the *moral* effect of a *moral* cause," etc.

Two extracts from the same author, just quoted, will show to what shifts the advocates of this theory must resort in attempting to explain all mental states, suffering, and insanity, on a physical basis; and also the confession of their inability to demonstrate in any scientific way the organic or functional changes upon which these conditions are assumed to depend: "It behooves us distinctly to bear in mind, when we take the moral causes of insanity into consideration, that the mental suffering or psychical pain of a sad emotion testifies to actual wear and tear of nerve-element, to disintegration of some kind; it is the exponent of a physical change," etc.[1]

Is not this putting the cart before the horse? One might as well say that labor was the exponent of perspiration, or scorn the exponent of a curl of the lip.

But again: "It is quite true that when we have referred all the cases of insanity which we can to bodily causes, and grouped them according to their characteristic bodily and mental features, there will remain cases which we cannot refer to any recognizable bodily cause, or connect with any definite bodily disease, and which we must be content to describe as *idiopathic*. The explanation of these cases we shall probably discover ultimately in the influence of the hereditary neurosis, and in the peculiarities of individual temperament."

Now, what does *idiopathic* mean in this connection, but an affection of the mind independent of any physical disease, in the way of causation? And again, "peculiarities of the individual temperament" is only another name for the "individual neurosis," or else it means mental idiosyncrasies not necessarily dependent upon any particular neurosis.

My eye has just fallen upon a statement of the argument in favor of the invariably physical basis of insanity, by an American writer, Dr. Earl, of Massachusetts. It is what is sometimes called "an argument in a nutshell." I find it quoted in the annual report of a Western asylum as quite conclusive on the subject. It is as follows:

"Doubtless every observing and reflecting person well knows that mental influences may cause not only bodily dis-

[1] Body and Mind, p. 94.

ease, but death; and that bodily disease may cause disordered action or *manifestation* of action of the mind. But there are probably but few who would not give their concurrence in the opinion that, in a person born with both soundness of mind and body, the mind will not become insane so long as the body retains its original health. This proposition granted, the logical consequences must follow, that, the mind being insane, we must seek the cause in corporeal maladies, and to them, in the attempt to cure, we must apply the appropriate remedies. Hence, in each case, the symptoms must be observed, and the medicines prescribed, as in any other bodily disease."

It seems to me that the logic of this argument is, to say the least, lame in one leg. Thus, if mental influences may cause bodily disease, as well as bodily disease produce disordered action of the mind, why may it not also be said that, in a person born with both soundness of mind and soundness of body, the body will not become diseased so long as the mind retains its original health? And then the logical consequence would be that, when the body is diseased, we must seek the cause in mental maladies, and treat them accordingly.

It may be said further, in this connection (and it may help to clear the subject of some confusion), that in the case of insanity, as of consequents generally, it is not dependent upon any single antecedent, but upon the sum of several antecedents. In these days of modern civilization, it is not common to find individuals who do not bear within them an inheritance of constitution, temperament, mental structure, and habits, more or less impaired or vitiated. Besides, in the history of different individuals, the order of succession in the influences culminating in insanity may be quite opposite, and thus their relative force, and the peculiar manner of their working, may differ greatly. So in this matter, as in every other, we single out one of the antecedents, that from its relative importance, or the point of time of its operation, or some other reason, appears to be the inducing agent, and call this the cause, and then speak of the others as conditions or tendencies. In doing this, if it happens that a

distinctively moral influence is assigned for the mental derangement, there is nothing, as yet, in the results of physiological or pathological research to allege against it.

When, for *cause*, the word *basis* is substituted (as it sometimes is), and it is then said that the basis of insanity is always a physical one, this is a mere begging of the question. It is an assumption, as a fact, of the very point to be proved.

Attention may be called, in passing, to a circumstance that seems somewhat peculiar. Here are two classes of theorists, whose several doctrines and methods have somehow become transposed, so that the method of each is apparently the outcome of the belief of the other. I can think of no better illustration than that decussation of fibres that occurs at the base of the brain, by which impressions originating in one or the other side of the cerebral structure expend their activities in the opposite side of the body. Thus we have one party believing that mind is a mere resultant from physiological action of the brain, and derangement of mind an effect of the pathological condition of the same; and yet believing in the influence of moral causes in the production of insanity, and relying largely on moral treatment in the cure of insanity. On the other hand, we have the author of this paper repudiating zealously these materialistic views of the nature of mind, and at the same time denying the efficiency of moral causes in mental derangement, and professedly putting little faith in the moral treatment of insanity.

The two leading ideas of the paper, reversing the order in which they are stated, are as follows: 1. The inherent, essential, constant, and characteristic element in insanity is a morbid action in the cerebral structure, and this diseased condition is always precedent and causative of the mental derangement. 2. The non-efficiency of moral causes in the production of insanity.

Dr. Gray not only believes that the former is true from the observation of the past, but that future pathological investigations will make it demonstrably certain in every form of insanity. Thus he says: "We believe that physiological science will so advance that every process in the complex phenomena of physical life, in health and disease, shall be

read and revealed and understood." Cherishing these views, as a matter of prevention, he thinks there is little occasion to guard and admonish individuals and society against those habits of thinking, and modes of feeling, and yieldings to impulse and passion, that undermine the mental health, as the violation of physiological laws breaks down the physical constitution. As a matter of treatment, the only course he suggests is one of "rest, nutrition, sleep, and medication."

From this paper, it would appear that the only idea of *moral treatment* he has, or would put in practice, is developed in the following passage:

"We do not treat the mental phenomena which appear as indices of the cerebral disorder; but we point out to the patient his changed mental condition, and endeavor to show him that his delirious conceptions are delusions, and result from the morbid condition of his brain; and that, with restoration to health, these delusions and misconceptions will vanish. Many may be convinced of this; and, though the delusions do not disappear with this conviction, yet persons may, and often do, so far keep constantly in mind their true condition, and exercise such control, as largely promote their recovery. The mind by this effort uses the brain; and, by the exercise of its legitimate dominating power, moderates its action in some directions and increases it in others. The mind exercises choice, and controls itself, and by limiting and modifying its use of its organ, the brain, aids in the restoration of that organ."[1]

Maudsley, whose writings would seem to have shaped the views of Dr. Gray in some respects, differs widely from him in these last-mentioned opinions. He makes some admirable suggestions for the moral treatment of the insane in the last

[1] Says Dr. Gray, on page 23 of his pamphlet: "We knew '*spontaneity*' to be a reality of our own consciousness, and yet, in the language of Herbert Spencer, it is impossible to make this spontaneity a 'factor' in any mere natural or physical process whatever." If, then, "the mind exercises choice, and controls itself, and limits, and modifies its use of the brain, thus aiding in its restoration to health," it would seem as if spontaneity, in spite of Herbert Spencer's opinion, could be made a factor in a natural and physical process.

chapter of his book, from which I borrow a couple of passages: "When insanity has become chronic, or when fixed delusions are established, there is small hope of special benefit from drugs. The general health being duly attended to, a systematic moral treatment will be best adapted to restore health of mind." After showing the principle which should guide, i. e., a proper diversion of the mind from the morbid trains of thought and feelings, he adds: "If there is some fixed delusion, it will do no good to enter upon any systematic argument against it; there would be almost as much hope of an argument against the east wind, or against a convulsion; but, by engaging the mind in other thoughts as much as possible, and thus substituting a healthy energy for the morbid energy, the force of the delusion will be most likely to abate and finally to die out."

It might be suggested at this point that, reasoning backward from effect to cause, the success of moral treatment, in certain cases of insanity, might be an argument, not to say an invincible one, that moral causes might have been efficient in producing them, and that without the intervention of any physical agencies. So, too, some of the modes in which Reason assumes her throne after derangement point to the same view. Says Griesinger: "Sometimes recovery resembles simple waking; when the individual, astonished, seeks as it were to know himself, the masses of ideas belonging to the disease soon disappear, and the old idea returns uninjured and unimpaired to its former place."

Take another fact, that, according to the best authorities, mental shocks or violent emotions have not unfrequently brought a sudden termination, not to say cure, to even insanity of long standing. Sometimes such shock acts directly upon the mental status, and at others indirectly through the physical system.

Holding theoretical views such as are set forth in the paper under discussion, we should expect to find that the method of treatment adopted at the asylum under the management of its author would be correspondingly shaped and moulded. What the treatment at Utica has been, and is now, may be gathered from the annual reports of that institution.

In its early days the moral treatment was made very prominent, as the reports of Dr. Brigham show. Nor did he neglect the varied resources of the medical art in meeting the physical symptoms either underlying or associated with the mental derangement. Not only in his reports, but in his other writings, he laid great stress upon keeping a sound body to secure mental health; and, when the balance of the mind was lost, he showed the importance of efforts at re-establishing the physical health as the first step toward sanity.

Since his day, I think it may be said that discoveries have been made that bring out in a more clear and definite light what was formerly spoken of as sympathetic action in disease, that is, the frequent occurrence of affections once supposed as originating exclusively in the nervous centres, that are now known to be owing to a reflex influence through peripheral nerves, from distant organs. Of course, this changes the direction of the remedial efforts of the physician.

Judging by the reports of Dr. Gray, referred to, it may be said that the somewhat elaborate means of moral treatment adopted by Dr. Brigham have been gradually given up, or rather, given place to general remedial means. The theory is, that at the basis of most cases of insanity is an anæmic condition of the system, and that the especial organic or functional disease, upon which the derangement primarily depends, originates in this.

"The great indications for treatment, therefore, are nutrition, sleep, rest. The medication is mainly directed to secure these, by sustaining, stimulating, and invigorating the nutritive functions, in order that the system may be able to receive and assimilate the requisite amount of aliment for building up and renewing the tissues, and to calming agitation, allaying irritability, and controlling the inordinate cerebral action, that due rest and sleep may be obtained."

"The average per cent. under medical treatment during the year 1865 was 43 per cent." (I name this year because full statistics are given in the report for that year.) "The greater portion of the feeble and broken-down, represented as under regular medical treatment, are on remedies administered with a view to building up the general health, and but

a small number (7 per cent.) on soporifics alone. The prescriptions daily made, independent of those for patients on the list of the above table, average 14. per day." In other words, $2\frac{1}{2}$ per cent. of the patients have a special medical treatment.

Dr. Alexander Robertson, of England, in describing his visit to the Utica Asylum, and the treatment there, says, quoting Dr. Gray: "Persons suffering from chronic melancholia are permitted to do very much what they choose, within the bounds, of course, of their own safety, and that of others, for a long time, at first—six months or a year, perhaps—attention being directed principally to the promotion of their nutrition. When their physical state improves, then, and not till then, they are asked to occupy their attention in work," etc. (or other forms of moral treatment).

There is a free use of malt and spirituous liquors, the vegetable tonics, phosphoric acid, with nightly soporifics when needed. It is, in short, class treatment instead of individual and special treatment.

Such is the treatment that prevails at Utica, as one reads it in the annual reports of that institution for the last dozen years. It is the natural outcome of the "physical-basis" theory of insanity and of that view of causation that rules in its management.

Twenty years ago, the superintendents of American asylums for the insane, in one of their annual conventions, adopted unanimously a resolution that the highest number of patients that could be treated *with propriety* in one institution was two hundred and fifty, while two hundred was the preferable maximum. And also that for the former number of patients one medical superintendent and two medical assistants were needed. This was in the days of a belief in moral causes and mental disease, and a faith in moral treatment, either alone or in conjunction with appropriate hygienic and medical means. This embodied the experience and wisdom of a generation of alienists. A supposed necessity or expediency induced this same association, at a later day, to modify its views upon these points, and we now find all over the land institutions, two or three times as large as was then proposed. As a con-

sequence, with the limited number of medical officers, it has been almost impossible to make a study of individual cases in their medical and psychical aspects. At all events, it has been very much easier for those in charge to permit their patients to do very much what they chose for six months or a year, attention being directed principally to the promotion of their nutrition, till their physical state improved.

Think what a variety of conditions complicate the problem of cure in the case of every insane man or woman; and then multiply this by the number of cases to be regarded possibly curable in an asylum like that at Utica, with six hundred or more patients! And remember that, practically, these are under the charge of two physicians; for the superintendent's general duties, at the head of a community so large, responsible for the care of the building and supplies, and the general conduct of the assistants of every name, his occasional absences in attendance upon the courts, leave him little time for the medical supervision of the institution. For the third medical assistant there are the multifarious duties of the supernumerary in such a case; the record of cases, the statistics, the pathological investigations, etc., etc.

It will be seen from this—and Utica is but the type of many another asylum for the insane—how naturally alienists may have drifted into this "physical-basis" theory of insanity; have lapsed into the condition of mere doctors of medicine in the narrow sense. In this connection let me quote from Maudsley's chapter on the treatment of insanity, which is full of admirable suggestions:

"It now remains to speak of the means to be adopted for the care and treatment of the insane who are deemed curable. This treatment is moral and medical, the two methods being properly combined in every case. Again, it should be specially directed to the character and circumstances of the individual case; it is necessary to penetrate the individual character, in order to influence it beneficially by moral means, and to investigate carefully the concurrence of conditions that have issued in insanity, in order, so far as possible, to remove them. Not the least of the evils of our present monstrous asylums is the entire impossibility of any thing like individual

treatment in them. It would not be putting the matter fairly to point out the absurdity of two medical men affecting to treat really seven or eight hundred lunatics in an asylum, because the majority of them assuredly do not require any medical treatment; but it is perfectly fair to call attention to the uncertain chances of satisfactory treatment which the small, curable minority have under such circumstances. To the medical officer these are not so many *individuals*, having particular characters and particular bodily dispositions, with which he is thoroughly acquainted, but they are apt to become so many lunatics, whom he has to inspect as he goes his round of the establishment, as he inspects the baths and the beds; and the only person, perhaps, really aware that each of them has an individual character, is the attendant. Herein lies a reason why the best possible treatment in some instances undoubtedly is to remove a patient from an asylum to the care of his own friends. . . . Indeed, I cannot help feeling, from my experience, that one effect of asylums is to make some permanent lunatics; continually living in the atmosphere of the worst lunacy, certain patients seem to become impregnated with its baneful inspiration, and after a time sink to the situation. And I can certainly call to mind more than one instance in which I thoroughly believe that the removal of a patient from an asylum was the salvation of his reason."

Could not the term "absurdity," applied above, be used with still more force, in a case where, practically under the direction of but two medical men, six hundred patients are supposed to be treated; and all these, under the law, regarded as curable cases, and, at all events, 70 per cent. of whom have been insane less than a year.

Says Griesinger: "Nowhere is the desideratum strictly to keep in view the individual of greater importance than in the treatment of insanity; nowhere is the constant consciousness more necessary that it is not a disease, but an individual patient—that it is not mania, but an individual who has become maniacal—that is the object of our treatment. Each individual case should be specially investigated in all its bearings, which constantly vary, and all the means of anatomical diagnosis and pathological research ought to be brought to bear upon its elucidation; in fact, a penetration into the psychical

individuality of the patient is here demanded, which is scarcely ever necessary in ordinary medical practice."

In the annual reports of the asylum at Utica, it is said with complacency, that "its records will show that full pace has been kept with the general progress of medical science—that moral or medical remedies have been discarded or adopted, as soon as investigation or experience has shown them to be evil or good. The proportion of attendants to patients has been nearly doubled, and in all respects the institution has sought to adopt at once whatever has seemed essential to the more certain and speedy recovery of patients, or which might contribute to their more humane treatment. It has always maintained a foremost rank in all the great improvements in sanitary measures."

In short, every means and appliance, that money could supply, has been at the command of its management. The annual cost of board and maintenance of the patients is certainly up to the average of the other State institutions of the country. It is claimed that the method of treatment, based upon the modern theory of the causation and nature of insanity, is a very great improvement upon that in vogue twenty years ago; and in reading the paper, and seeing with what zeal and earnestness the peculiar views and methods of the author are commended to the profession, one almost wonders that the insane in former days were cured at all. Certainly, during the period named, important remedies have been added, empirically or otherwise, to the resources of the specialist in insanity.

That homely old proverb, "The proof of the pudding is in the eating," has an application even in relation to medical practice. I therefore, in closing, present some of the statistics of the Utica Asylum, from its establishment. It will be borne in mind that the records cited have been kept under the supervision of the author of the paper, for the last eighteen years, or nearly two-thirds of the whole period.

It will be seen that, consistently with the changing views of the managers, the cost of medical supplies has been constantly an increasing one. In the six years of Dr. Brigham's administration, the average annual cost of medicine and medical supplies, for each patient, was $1.15.

General Statement of the Operations of the New York State Lunatic Asylum for the Twenty-seven Years ending November 30, 1869.

YEARS.	Number admitted.	Number discharged.	Number treated.	Discharged recovered.	Discharged improved.	Discharged unimproved.	Discharged, not insane.	Died.	On Average Population.			On Admissions.			Percentage of improved on Admissions.	Cost of Medicines and Medical Supplies.	Cost of Medicines per Patient.
									Average Population.	Recovered.	Percentage.	Admitted.	Recovered.	Percentage.			
1843	276	80	276	53	14	6	...	7	106	53	48.52	276	53	19.20	05	$126 85	$1.19
1844	275	211	471	132	47	16	...	61	236	132	55.93	275	132	48.80	17	262 02	1.11
1845	293	268	553	135	78	34	...	21	265	135	50.94	293	135	46.07	27	322 70	1.22
1846	337	248	622	133	60	33	...	22	283	133	46.99	337	133	39.46	17	467 16	1.65
1847	428	330	802	187	70	25	...	48	415	187	45.06	428	187	43.60	16	422 41	1.02
1848	405	382	877	174	84	38	...	86	474	174	36.70	405	174	42.96	21	439 73	.92
1849	362	408	857	203	66	70	...	69	454	203	44.71	362	203	56.07	98	569 01	1.25
1850	367	387	816	171	57	108	...	51	433	171	39.49	367	171	46.59	15	1756 65	4.06
1851	366	360	795	58	28	57	...	24	440	112	23.45	366	112	36.60	08	757 89	1.72
1852	390	400	825	156	53	152	...	39	441	156	35.37	390	156	40 00	14	650 05	1.47
1853	424	403	849	169	66	129	...	39	423	169	39.95	424	169	39.85	16	642 96	1.52
1854	390	386	836	164	42	115	...	65	444	164	37.16	390	164	42.05	11	1163 05	2.63
1855	276	278	725	128	15	79	16	32	467	128	27.40	275	128	46.54	06	2363 68	5.06
1856	242	236	697	100	33	65	8	30	454	100	22.24	242	100	41.73	14	1080 91	2.38
1857	235	245	606	95	25	83	10	32	463	95	20.52	235	95	40.42	11	1334 55	2.88
1858	333	282	784	114	33	99	5	31	489	114	23.31	333	114	34.23	10	2042 04	4.18
1859	312	295	814	114	57	86	3	35	509	114	22.40	312	114	36.54	18	2399 38	4.71
1860	337	339	856	105	56	133	3	42	516	105	20.33	337	105	31.15	16	2096 59	4.06
1861	295	280	812	83	58	104	4	31	519	83	15.99	295	83	27.46	20	2408 32	4.64
1862	287	305	819	106	51	115	3	30	526	106	20.15	287	106	36.93	18	2775 55	5.28
1863	287	267	801	80	38	101	6	42	528	80	15.15	287	80	27.87	13	2784 47	5.27
1864	319	289	853	109	44	84	4	48	560	109	19.46	319	109	31.02	14	4545 85	8.12
1865	356	305	920	113	35	91	9	57	591	113	18.95	356	113	31.74	10	4267 76	7.22
1866	388	362	1003	164	39	106	9	44	643	164	25.50	388	164	42.26	10	5874 96	9.13
1867	401	439	1042	159	58	164	7	51	610	159	26.00	401	159	39.65	14	5253 43	8.61
1868	382	415	985	157	85	105	10	58	589	157	26.65	382	157	41.00	22	4137 90	7.02
1869	463	430	1033	156	85	117	8	64	600	156	26.00	463	156	33.69	18	4464 89	7.44

Statistics of Three Massachusetts Institutions.

YEAR.	Cost of Medicine.	Average Population.	Average Cost per Patient.	Recovered, Per-centage.	Dismissed improved.	Dismissed not improved.	Deaths.
1867	$2,535 74	1169	$2 18	43	25	13	19
1868	2,896 43	1172	2 49	35	30	15	20
1869	3,261 57	1183	2 79	36	32	18	14
1870	3,103 05	1192	2 60	34	32	19	14
Average	$2,948 44	1179	$2 51	37	29	16	17

In the last six years, the average annual cost of the same articles, for each patient, has been $7.94. Of course, some of this difference is owing to the increased cost of these articles; but, with this allowance, it is obvious that the difference is mainly owing to the more liberal use of medicine and stimulants than formerly, in the treatment of insanity.

The statistics given of the Utica Asylum also show that the percentage of recoveries, during these later years, whether based upon the whole number treated, the average population, or the number of admissions, has not been an increasing one. In making the comparison also, it may be mentioned that, of the four hundred and sixty-three cases admitted in one of these years (1869), 20 per cent. had been insane less than one month, 40 per cent. less than three months, and 70 per cent. less than a year. In that respect, the circumstances were favorable for recovery.

I also give the partial statistics of three Massachusetts institutions—all I have at hand—which would seem to indicate that the medical treatment, when pushed, is no more successful than when less vigorous medication is adopted.

In citing these results in the case of the Utica Asylum, I would not be understood as presenting them to prove that they are less favorable than in the case of other institutions during the same period, but as showing that the modern system of treatment, based upon the exclusively "physical-basis" theory of insanity, is no more successful than in former times, though it must be conceded that the resources in the way of remedial agencies have been greatly enlarged. Let me quote from the proceedings of a meeting of the British Medico-Psychological Association, held about a year ago: "Dr. Howden wished to know on what authority Dr. Tuke made the statement that the proportion of recoveries was the same under the old system of restraint as it was now."

"Dr. Tuke: I don't think that I said so. I said, 'it is said that it was,' and I have not been able to disprove it."

In closing, I ought to apologize for the somewhat disconnected manner in which I have treated my subject. It has resulted, in part, from the attempt to express my own convictions, while reviewing the opinions of another; and, in part, because I wished to be as brief as possible.

I desire especially to excuse myself for a too controversial tone and manner in the utterance of my convictions. I regret this more, because I may have seemed, to some of my hearers, to be attacking the author of the paper, when I have only aimed to controvert his opinions.